

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
RISK MANAGEMENT PROGRAM**

October 12, 2007

This Policy is effective immediately upon adoption and supersedes all previous risk management policies.

I. PURPOSE

The CalPERS Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), sets forth CalPERS' overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment Policy ("Policy") for the Risk Management Program ("Program"). The Policy is designed to ensure that an effective risk management system is in place to monitor the risk levels of the CalPERS investment portfolios.

II. STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Achieve the highest rate of total return reasonably possible within prudent levels of risk and liquidity;
- B. Maintain sufficient diversification to avoid large losses, minimize unintended risk and preserve capital;
- C. Provide an integrated process for overall [risk management](#) on both a consolidated and disaggregated basis.

III. RESPONSIBILITIES

- A. The Program is intended to manage CalPERS' economic and investment risks. It is not intended to manage other risks that CalPERS faces, including but not limited to operational risks, compliance risks and legal risks. These risks are managed by other units within CalPERS and are addressed within their separate policies.
- B. CalPERS Investment Staff ("Staff") is responsible for the following:

1. Selecting, maintaining and enhancing the [risk management tools](#) used by the Program to provide analyses that inform and support the investment actions of the entire CalPERS Investment Staff.
 2. Reporting on CalPERS' investment risks and associated returns to the Committee and Investment Staff as described in Section V. below.
- C. The Risk Management Consultant and General Pension Consultant are responsible for advising Staff on risk management efforts and reporting to the Committee as appropriate.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

The Program shall be benchmarked against the risk management practices of other major pension fund peers to remain in the forefront of pension fund risk management.

V. INVESTMENT APPROACHES AND PARAMETERS

RISK REPORTS

- A. Staff shall provide monthly reporting on the investment risks of the CalPERS portfolio. These reports are to provide the expected [volatility](#) and [Value at Risk](#) ("VAR") of the CalPERS invested and policy portfolios. These analyses show risks for the entire investment program, for each separate asset class, for groups of accounts and for individual accounts and managers. The analyses shall provide [ex post](#) results and [ex ante](#) forecasts of [absolute levels of risk](#) and [risks relative to benchmarks](#) at all levels of the investment program.

Reports shall include but are not limited to:

1. CalPERS' [current asset allocation](#) relative to the [policy asset allocation](#) to be used by Senior Investment Staff in their monthly Asset Allocation Meeting.
2. Providing forward looking risk analyses of both existing and proposed investment programs.
3. Total Portfolio reports showing the current level of risk being taken with a comparison of the history of the risks that have been taken.
4. A Concentration report highlighting the 20 companies in which CalPERS has the greatest investment concentration across asset classes and portfolios.

5. External Manager Monitoring reports for the purpose of monitoring CalPERS' external managers.
6. Reports separating diversifiable risk from non-diversifiable risk.
7. Customized reports and risk analyses for the asset class investment units as needed.
8. Reports evaluating the accuracy of the risk management system forecasts.
9. Reports showing both risk and returns to aid in evaluating the value added of the investment programs.

IMPLEMENTATION AND MONITORING

- A. The Risk Management Program shall be continuously reviewed by Staff to enhance the timeliness, accuracy and usability of CalPERS' risk management tools.
- B. The Chief Investment Officer, Senior Investment Officers and their professional investment staffs shall incorporate the relevant information generated by the Risk Management Program as part of their investment decision making processes.

VI. GLOSSARY OF TERMS

Key words used in this policy are defined in CalPERS' Master Glossary of Terms.

Approved by the Policy Subcommittee: June 11, 2004
Adopted by the Investment Committee: September 13, 2004
Revised by the Policy Subcommittee: December 10, 2004
Approved by the Investment Committee: February 14, 2005
Revised by the Policy Subcommittee: October 12, 2007

Asset Class Glossary: Investment and Risk Management
Policy: Risk Management Program
October 12, 2007

Absolute Levels of Risk

Expected or historical annualized standard deviation of total return to a portfolio.

Current Asset Allocation

The actual asset allocation weights of the invested CalPERS' portfolio.

Diversifiable Risk (Unsystematic Risk)

The change in price of an individual security due to circumstances specific to that security, as opposed to circumstances shared by the general market. This risk can be largely eliminated in a well-diversified portfolio.

Ex Ante Risk

Forecasted risk; expected levels of volatility.

Ex Post Risk

Realized risk; measured level of actual volatility.

Non-Diversifiable Risk (Systematic Risk)

The change in price of an individual security due to circumstances shared by the general market. This risk will predominate in a well diversified portfolio.

Policy Asset Allocation

CalPERS' strategic asset allocation target weights.

Risk Management

The process of defining, identifying, measuring, and managing risk.

Risk Management Tools

Systems, models, and analyses of portfolios that provide forecasts of portfolio risks and returns and correlation of risks and returns across investments and support the portfolio management process.

Risk Relative to Benchmark

Expected or historical annualized standard deviation of the differential returns between a portfolio and its benchmark. Also referred to as tracking error or active risk.

Value Added

The difference in realized returns between a portfolio and its benchmark.

Value at Risk (VaR)

The worst-case loss that might be expected from holding a portfolio over a given

time period with a specified probability. CalPERS uses a 95th percentile, one year horizon definition for VaR. (e.g., a \$1 billion VaR would have an expectation that at the end of one year, there is a 5 percent probability that one would have lost \$1 billion or more.)

Volatility

Expected or historical annualized standard deviation of returns. Returns can be total returns or the differential returns between a portfolio and its benchmark.